CLAIMS

1. A device for using various types of coupling system (R_i) to connect a tube (2) to a filter housing (3) including a series of tubular filter elements, each coupling system (R_i) of a given type comprising:

- a flange (B_i) of said type fitted to the tube (2);
- a backing-plate (P_i) of said type for connection to the filter housing;
- a sealing member (E_i) interposed between said flange (B_i) and said backing-plate (P_i); and
- tightening means (S_i) of said type acting between said flange and said backing-plate in order to provide sealing between them, the device being characterized in that it comprises:
- a head plate (21) independent of the type of coupling system (R_i) fixed to the housing (3) and provided with passages (22) for receiving the ends of the tubular filter elements, these passages (22) opening out in a bearing face (23) of the head plate;
- for each backing-plate (P_i) of a given type, a first bearing face (25) complementary to the bearing face (23) of the head plate (21), and a second bearing face (29) adapted to co-operate with the flange (B_i) of corresponding type;
- a sealing gasket (28) interposed between the first bearing face (25) of a backing-plate (P_i) of a given type and the head plate (21); and
- releasable connection means (30) between the head plate (21) and each backing-plate (P_i) of a given type to provide sealing between them and to enable each backing-plate (P_i) of a given type to be mounted on and removed from the head plate (21).

2. A device according to claim 1, characterized in that a backing-plate (P_1) of a given type forms part of a clamp type coupling system (R_1).

3. A device according to claim 1, characterized in that a backing-plate (P_2) of a given type forms part of a gripper type coupling system (R_2).

4. A device according to claim 1, characterized in that a backing-plate (P_3) of a given type forms part of a flange type coupling system (R_4).

5. A device according to any one of claims 1 to 4, characterized in that each backing-plate (P_i) of a given type has a series of holes each arranged to coincide with the passages (22) receiving the ends of the tubular filter elements.

6. A device according to claim 1, characterized in that the releasable connection means (30) are constituted by screws, clamps, grippers, or the like co-operating with the head plate (21) and each backing-plate (P_i) of a given type.

7. A device according to claim 2, characterized in that the backing-plate (P_1) of the clamp type co-operates with a flange (B_1) of the clamp type via tightening means (S_1) constituted by an asymmetrical clamping collar enabling a tube (2) of one diameter to be connected to a filter housing (3) of a different diameter.

8. A filter installation including a tube (2) connected to a filter housing (3) by means of a connection device (1) according to any one of claims 1 to 7.